

Chapter 1 Points, Lines, Planes, and Angles

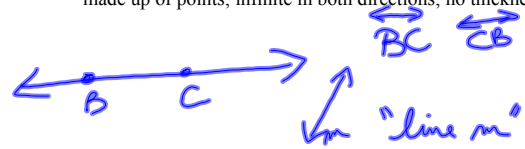
1-1 Points, Lines, and Planes

point location; no size; no thickness

A •

Sep 10-2:17 PM

line made up of points; infinite in both directions; no thickness

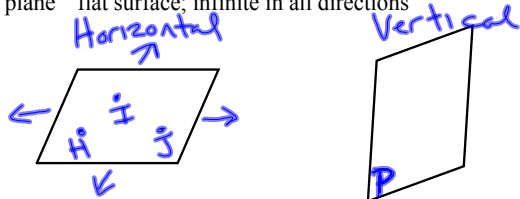


collinear points--points on the same line



Sep 10-2:22 PM

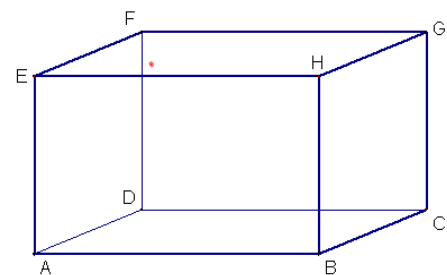
plane flat surface; infinite in all directions



plane H I J

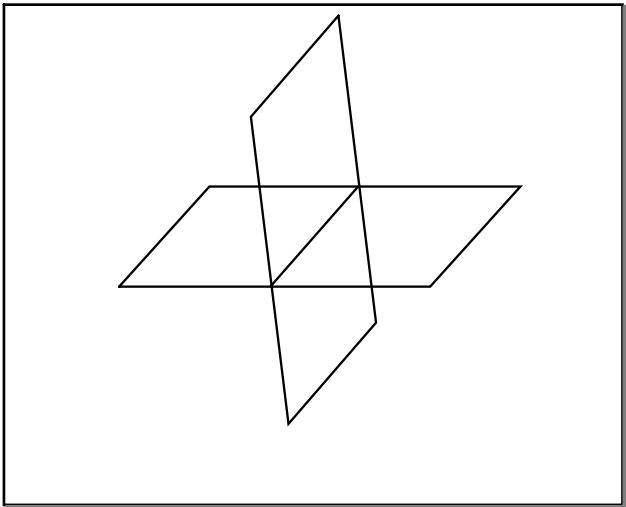
-name w/ 3 noncollinear pts

coplanar points-- points on the same plane

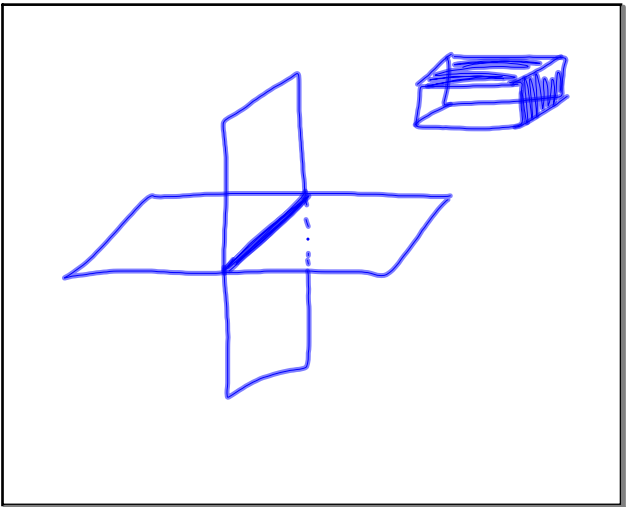


Sep 10-2:23 PM

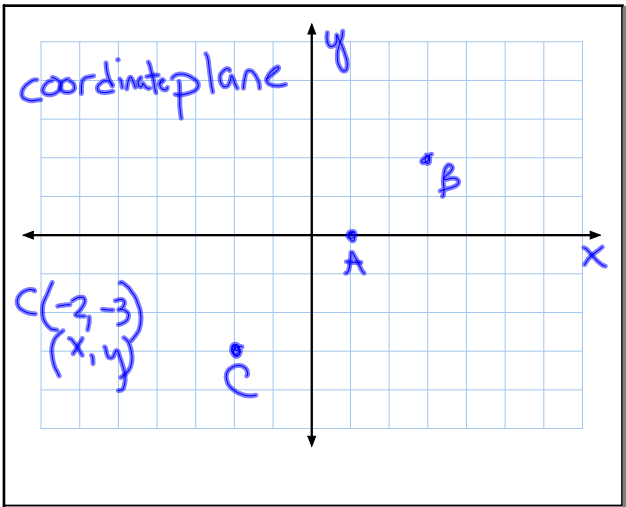
Sep 10-2:26 PM



Sep 10-2:27 PM



Sep 10-8:03 AM



Sep 10-2:31 PM

Space--set of all points

Sep 10-2:31 PM

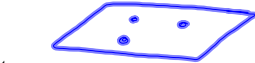
## 2.5 Postulates

**Postulates** – describes fundamental relationships between basic terms in geometry. They are accepted as TRUE!! No proof required.

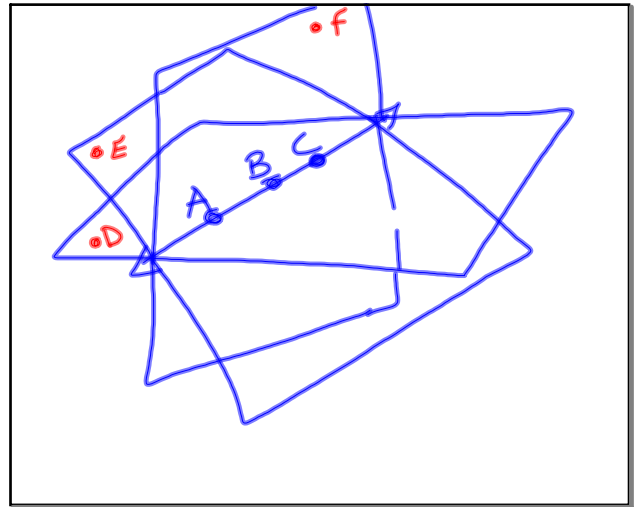
2.1 Through any two points, there is exactly one line



2.2 Through any three points not on the same line, there is exactly one plane.



2.3 A line contains at least two points.



Sep 3-11:26 AM

Sep 10-8:13 AM

2.4 A plane contains at least three points not on the same line.



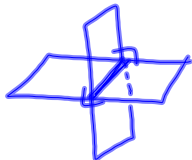
2.5 If two points lie in a plane, then the entire line containing those points lies in that plane.



2.6 If two lines intersect, then their intersection is exactly one point.



2.7 If two planes intersect, then their intersection is a line.



Determine whether the statement is always, sometimes or never true.

- 1) If plane T contains  $\overleftrightarrow{EF}$  and  $\overleftrightarrow{EF}$  contains point G, then plane T contains point G.
- 2) For  $\overleftrightarrow{XT}$ , if X lies in plane Q and Y lies in plane R then plane Q intersects plane R.
- 3)  $\overleftrightarrow{GH}$  contains three noncollinear points.

Sep 3-11:28 AM

Sep 3-11:28 AM

white erase boards

Homework  
p 9-10  
#s 13-18, 21-26, 30-35

Sep 10-2:31 PM

Sep 10-2:33 PM